REMARKS

Upon entry of the above amendment, the claims will be 1 to 4 with claims 1 to 3 being withdrawn from consideration.

The above amendment is responsive to points set forth in the Official Action.

The above amendment incorporates features from claims 5 and 6 into claim 4. Further support for above-amended claim 4 is evident from page 7, lines 7 to 11 and page 8, line 5 of the present specification.

The significance of the above amendment will become further apparent from the remarks below.

With regard to the objection of claims 4 to 6 as indefinite, claim 4 has been amended per the Examiner's suggestion.

Claims 4 to 6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over GB 2085034 or JP 09184045.

This rejection is respectfully traversed.

With regard to the rejection on GB 2085034, the process of claim 4 is very different and unobvious from that of this reference. The process of claim 4 comprises a steel-working step in the temperature range of from 400 to 800°C and a pre-oxidation treatment.

The process of GB 2085034 comprises a cold working step and a heat treating step by exposing the surface of the steel to moist hydrogen at high temperature around 550°C.

The cold working adopted in GB 2085034 has been generally known as a working carried out at around room temperature. The steel-working of claim 4 is, on the other hand, carried out at a higher temperature range of 400 to 800°C rather than room temperature and the steel-working is a warm intense working as disclosed at page 6, line 18 of the specification, distinguished from the cold working of GB 2085034.

In addition, GB 2085034 discloses shot peening or grit blasting as a candidate for a suitable process for the cold working.

Taking the problems of the prior art that are disclosed in the specification into consideration, it is clear that the steel-working of claim 4 is very different from that of the cold

working of GB 2085034. The steel-working is concretely a working of which the working degree is 0.7 or higher as claimed in previous claim 5, now incorporated in claim 4.

Further, the pre-oxidation treatment of claim 4 as above-amended, is carried out by holding for 30 to 90 minutes at a temperature of from 400 to 800°C under an atmosphere which contains a gaseous oxygen. See page 7, lines 7 to 11 of the present specification.

On the other hand, the atmosphere in the pre-treatment of GB 2085034 is moist hydrogen which is said to improve corrosion resistance, apparently due to the formation of a layer of chromium oxide on the surface.

In this regard, a chromium oxide protective film formed according to the process of GB 2085034 is, in fact, only a film in which Fe_2O_3 with a high concentration of Cr is produced because of the manner and conditions of the working and treating. The film obtained in GB 2085034 is inferior to the Cr_2O_3 film herein, in high-temperature stability. A Cr_2O_3 film with better physical property is exactly formed by the process of claim 4 as above-amended. See also page 8, line 5 in this regard.

Accordingly, the rejection on GB 2085034 is untenable.

With regard to the rejection on JP 09184045, the steel subject to working and heat treatment of above-amended claim 4 is also unobviously different from JP 09184045. The steel of JP 09184045 contains Cr at 0.001-2.0wt% and the steel is a steel with shock resistance that is used at room temperature. Therefore, the steel of JP 09184045 does not have oxidation-resistance as well as high-temperature strength, because a fine and stable Cr_2O_3 film with a few μm of thickness is not formed on the surface of the steel even by oxidation, due to the lower amount of Cr (note that present claim 4 recites 7 to 15 mass%) and the steel after working and heat treatment is not suitable as a high-temperature material.

Comparing the steel for the intended use of JP 09184045 and that of above-amended claim 4, the ferritic heat-resistant steel obtained by claim 4 is not realized by the process of JP 09184045. JP 09184045 does not disclose or suggest that a fine and stable Cr_2O_3 protective film is formed on the Cr-rich surface of the ferritic heat-resistant steel.

Further, claim 4 recites the amount of Cr as 7 to 15 mass% as disclosed on page 8, line 5 of the present specification to insure formation of such Cr_2O_3 film. This is not at all disclosed or suggested by JP 09184045.

For the foregoing reasons, it is apparent that the rejections on prior art are untenable and should be withdrawn.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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December 20, 2007